PERMIT AMENDMENT NO. 2499-001-0032-V-02-2
ISSUANCE DATE:

GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Air Quality - Part 70 Operating Permit Amendment

Facility Name:	**Appling County Pellets LLC**
Facility Address:	**248 Sweetwater Drive** **Baxley, Georgia 31513 (Appling County)**
Mailing Address:	**248 Sweetwater Drive** **Baxley, Georgia 31513**
Parent/Holding Company:	**FRAM Renewable Fuels, LLC**
Facility AIRS Number:	**04-13-001-00032**

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued a construction permit for:

The replacement of two pellet coolers (ID Nos. PC1 and PC2) and associated baghouse (ID No. BGH) with two new units (ID Nos. PC3 and PC4) equipped with cyclones (ID Nos. CYC3 and CYC4).

This Permit Amendment is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Amendment and Permit No. **2499-001-0032-V-02-0**. Unless modified or revoked, this Amendment expires upon issuance of the next Part 70 Permit for this source. This Amendment may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in App No. **TV-694793** dated **September 22, 2022**; any other applications upon which this Amendment or Permit No. **2499-001-0032-V-02-0** are based; supporting data entered therein or attached thereto; or any subsequent submittal or supporting data; or for any alterations affecting the emissions from this source.

This Amendment is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **15** pages.

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Richard E. Dunn, Director
Environmental Protection Division

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PART 1.0 FACILITY DESCRIPTION

1.3 Process Description of Modification

On September 22, 2022, Appling County Pellets (hereinafter "facility") submitted Application No. TV-694793 for the replacement of the two existing pellet coolers (ID Nos. PC1 and PC2) with two new units (ID Nos. PC3 and PC4), each equipped with a cyclone (ID Nos. CYC3 and CYC4). The baghouse associated with Pellet Coolers PC1 and PC2 (ID No. BGH) will also be removed.

No other units at the facility will be modified and no new regulations apply to the modification.

PART 2.0 REQUIREMENTS PERTAINING TO THE ENTIRE FACILITY

2.1 Facility Wide Emission Caps and Operating Limits

New Condition:

2.1.6 Upon startup of Pellet Coolers PC3 and PC4, The Permittee shall not process more than 350,000 tons (TONS) of wood through the dry hammermill (ID Nos. DHM1 and DHM2), pellet mills (ID Nos. PM1-PM10), pellet coolers (ID Nos. PC3 and PC4), and pellet handling/storage (ID No. PHS), combined, during any twelve consecutive months.
TONS = weight of wood in short tons at 5% moisture, nominal.
[391-3-1-.03(8)(a) and Avoidance of Major Source MACT per 40 CFR 63]

PART 3.0 REQUIREMENTS FOR EMISSION UNITS

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

3.1.1 Additional Emission Units

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
PC3, PC4	Two (2) Pellet Coolers rated at 20 ODT per hour each @ 5% moisture	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(n)	**CYC3, CYC4**	**Cyclones**

*New emission units are in bold, removed emission units have been crossed out

3.2 Equipment Emission Caps and Operating Limits

New Conditions:

3.2.6 The Permittee shall shut down and remove Pellet Coolers PC1 and PC2 and Baghouse BGH after the initial startup of Pellet Coolers PC3 and PC4.
[391-3-1-.03(2)(c)]

3.2.7 Upon the initial startup of Pellet Coolers PC3 and PC4, The Permittee shall operate and maintain the bin vent (ID No. BV) and cyclones (ID Nos. CYC3 and CYC4) during all periods in which the dry hammermills (ID Nos. DHM1 and DHM2) and pellet coolers (ID Nos. PC3 and PC4) are in operation.
[391-3-1-.03(2)(c); PSD Avoidance – 40 CFR 52.21]

3.4 Equipment SIP Rule Standards

Modified Conditions:

3.4.1 The Permittee shall not cause, let, suffer, permit, or allow the emission from equipment subject to GA Rule (e), which contains particulate matter (PM) in total quantities equal to or exceeding the allowable rate as calculated using the applicable equation below, unless otherwise specified in this Permit.
[391-3-1-.02(2)(e)1.(i)]

a. $E = 4.1 * P^{0.67}$; for process input weight rate up to and including 30 tons per hour.

b. $E = 55 * P^{0.11} – 40$; for process input weight rate above 30 tons per hour.

Where: E = allowable emission rate in pounds per hour;
P = process input weight rate in tons per hour.

3.4.2 The Permittee shall not cause, let, suffer, permit, or allow any emissions from equipment subject to GA Rule (b), which exhibit visible emissions, the opacity of which is equal to or greater than forty (40) percent.
[391-3-1-.02(2)(b)1.]

3.4.4 The Permittee shall take all reasonable precautions to prevent fugitive dust from becoming airborne. Reasonable precautions that should be taken to prevent dust from becoming airborne include, but are not limited to, the following:
[391-3-1-.02(2)(n)1.]

a. Application of water on dirt roads, materials, stockpiles, and other surfaces that can give rise to airborne dusts

b. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials.

c. Covering, always when in motion, open bodied trucks, transporting materials likely to give rise to airborne dusts.

d. The prompt removal of earth or other material from paved streets onto which earth or other material has been deposited.

e. Daily blow down of all interior equipment.

f. Daily cleaning of the floor to minimize dust accumulation on the floor.

g. Periodic inspection, maintenance and replacement of sawdust and biomass pellet loadout boots as recommended by the manufacturer.

h. The storage of the pellet will be in a warehouse enclosed by at least three sides to minimize fugitive emissions.

PART 4.0 REQUIREMENTS FOR TESTING

4.2 Specific Testing Requirements

New Conditions:

4.2.6 Upon the initial startup of Pellet Coolers PC3 and PC4, the Permittee shall conduct repeated performance tests for the bark burner (ID No. BUR), dryer (ID No. DRY), and dry hammermills (ID Nos. DHM1 and DHM2) for total particulate matter (TPM), volatile organic compounds (VOC), formaldehyde, acetaldehyde, and methanol emissions no more than 49 months after the previous performance test. EPA OTM-26 shall be used for testing VOC, formaldehyde, acetaldehyde, and methanol emissions. Testing shall be conducted while the dryer, hammermill, and pellet mills are operating at maximum capacity. During the testing, the Permittee shall establish the minimum temperature set point for the RTO temperature, as well as pressure drop range for the hammermill bin vent filter (ID No. BV) that are representative of the operation at the time of testing. In addition, the Permittee shall establish the operating parameters for the WESP and RTO, including the amount of wood dried, percent green softwood and WESP total power. These measurements shall be submitted along with the test reports. Subsequent performance tests shall be conducted once every 48 months.
[391-3-1-.02(6)(b)1.(i)]

4.2.7 Within 180 days after the initial startup of Pellet Coolers PC3 and PC4, the Permittee shall conduct performance tests for the pellet coolers (ID Nos. PC3 and PC4) for total particulate matter (TPM), volatile organic compounds (VOC), formaldehyde, acetaldehyde, and methanol emissions. EPA OTM-26 shall be used for testing VOC, formaldehyde, acetaldehyde, and methanol emissions. Testing shall be conducted while the pellet coolers are operating at maximum capacity. During the testing, the Permittee shall establish pressure drop ranges for the cyclones (ID Nos. CYC3 and CYC4) that are representative of the operation at the time of testing. These measurements shall be submitted along with the test reports. Subsequent performance tests shall be conducted once every 48 months.
[391-3-1-.02(6)(b)1.(i)]

4.2.8 Upon the initial startup of Pellet Coolers PC3 and PC4, if any emission factor derived from the results of any testing required in Conditions 4.2.2, 4.2.6, and 4.2.7 exceed the emission factors listed in Section 6, the Permittee shall calculate the emissions for that pollutant using the new and higher outlet/stack emission factors starting on the test date. The Permittee shall submit a permit application within 120 days after testing, (a) requesting the use of the newer emission factor or (b) demonstrating that the emission factor derived is not representative of normal emissions.
[391-3-1-.02(3) and 391-3-1-.03(2)(c)]

PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)

5.2 Specific Monitoring Requirements

New Conditions:

5.2.15 Upon the initial startup of Pellet Coolers PC3 and PC4, the Permittee shall install, calibrate, maintain, and operate systems to monitor the dried wood rate (ODT/hr) exiting the dryer (ID No. DRY) and the dry hammermills (ID Nos. DHM1 and DHM2), and the process rate and pellet production rate (ton/hr) through the pellet coolers (ID Nos. PC3 and PC4) and the pellet mills (ID Nos. PM1-PM10). The data shall be recorded hourly per Performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1.]

5.2.16 Upon the initial startup of Pellet Coolers PC3 and PC4, the Permittee shall install, calibrate, maintain, and operate pressure drop indicators on the dry hammer mill bin vent filter (ID No. BV) and the pellet cooler cyclones (ID Nos. CYC3 and CYC4). Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements. The Permittee shall read and record the pressure drops at least once per operating day. A logbook containing these records shall be available for inspection and/or submittal to the Division, upon request.
[391-3-1-.02(6)(b)1. and 40 CFR 70.6(a)(3)(i)]

5.2.17 Upon the initial startup of Pellet Coolers PC3 and PC4, the Permittee shall perform daily visible emissions checks (VE) on the dryer WESP/RTO exhaust, dry hammermill bin vent filter (ID No. BV) exhaust and the pellet cooler cyclone (ID Nos. CYC3 and CYC4) exhaust while the equipment is operating at the normal expected operating rate for each day of operation. The Permittee shall retain a record in a VE log, suitable for inspection and/or submittal to the Division, upon request. The checks shall be conducted using the procedure below except when atmospheric conditions or sun positioning prevent any opportunity to perform the daily VE check. Any operational day when atmospheric conditions or sun positioning prevent a daily reading shall be reported as monitor downtime in the VE log.
[391-3-1-.02(6)(b)1.]

a. Determine, in accordance with the procedures specified in paragraph c. of this condition, if visible emissions are present at the discharge point to the atmosphere and record the results in the daily VE log. For sources that exhibit visible emissions, the Permittee shall comply with paragraph b of this condition.

b. For each source that exhibits visible emissions, the Permittee shall determine the cause of that visible emission and correct the problem in the most expedient manner possible. The Permittee shall note the cause of the visible emission, the pressure drop, the raw material feed rate, any other pertinent operating parameters and the corrective action taken in the log described above.

c. The person performing the determination shall stand at a distance of at least 15 feet sufficient to provide a clear view of the plume against a contrasting background with the sun in the 140° sector at his/her back. Consistent with this requirement, the

determination shall be made from a position such that the line of vision is approximately perpendicular to the plume direction. Only one plume shall be in the line of sight at any time when multiple stacks are in proximity to each other.

5.2.18 Upon the initial startup of Pellet Coolers PC3 and PC4, the following pollutant specific emission unit(s) (PSEU) are subject to the Compliance Assurance Monitoring (CAM) Rule in 40 CFR 64.

Emission Unit	Control	Pollutant
Burner/Dryer (BUR/DRY) and pellet mills (PM1-PM10)	WESP/RTO	PM, VOC
Dry hammermills (DHM1, DHM2)	BV	PM

Permit conditions in this permit for the PSEU(s) listed above with regulatory citation 40 CFR 70.6(a)(3)(i) are included for the purpose of complying with 40 CFR 64. In addition, the Permittee shall meet the requirements, as applicable, of 40 CFR 64.7, 64.8, and 64.9. [40 CFR 64]

5.2.19 Upon the initial startup of Pellet Coolers PC3 and PC4, the Permittee shall comply with the performance criteria listed in the table below for the PM emissions from the dry hammermills (ID Nos. DHM1, DHM2).
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1 Visible Emission	Indicator No. 2 Pressure Drop
A. Representativeness [64.3(b)(1)]	Daily VE check	Daily Pressure Drop Reading
B. Verification [64.3(b)(2)]	N/A	N/A
C. QA/QC Criteria [64.3(b)(3)]	N/A	Pressure gauges are calibrated and maintained per manufacturer specs.
D. Frequency [64.3(b)(4)]	Daily	Daily
E. Data Collection [64.3(b)(4)]	VE log	Pressure drops are recorded electronically by a Data logger
F. Averaging Period [64.3(b)(4)]	6 minutes	N/A

PART 6.0 OTHER RECORD KEEPING AND REPORTING REQUIREMENTS

6.1 General Record Keeping and Reporting Requirements

Modified Condition:

6.1.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported:
[391-3-1-.02(6)(b)1. and 40 CFR 70.6(a)(3)(iii)]

a. Excess emissions: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)

None required to be reported in accordance with Condition 6.1.4.

b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)

i. Any twelve consecutive month period for which the total amount of wood dried in the wood dryer (ID No. DRY), recorded in accordance with Condition 6.2.1, exceeds 175,000 oven dried tons at 11% moisture.

ii. Any rolling twelve consecutive month period for which the total amount of VOC emissions from the pellet manufacturing operation calculated per Condition 6.2.10 equal to or exceeds 249 tons.

iii. Any rolling twelve consecutive month totals for a single HAP or total HAPs from the pellet manufacturing operation calculated per condition 6.2.15 that equals or exceeds 10 tons or 25 tons, respectively.

iv. Any monthly softwood processed and recorded as required by Condition 6.2.1 that does not meet the requirement of Condition 2.1.5.

v. Any twelve consecutive month period for which the total amount of wood processed in the pellet mills (ID Nos. PM1-PM10), pellet coolers (ID Nos. PC1 and PC2), and pellet handling and storage system (ID No. PHS), recorded in accordance with Condition 6.2.1, exceeds 350,000 tons.

vi. Upon the initial startup of Pellet Coolers PC3 and PC4, any twelve consecutive month period for which the total amount of wood processed in the pellet mills (ID Nos. PM1-PM10), pellet coolers (ID Nos. PC3 and PC4), and pellet handling and storage system (ID No. PHS), recorded in accordance with Condition 6.2.21, exceeds 350,000 tons.

c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)

i Any instance in which daily pressure drop readings of the dry hammermill bin vent (ID No. BV) and/or the pellet cooler baghouse (ID No. BGH) (measured in accordance with Condition 5.2.6) is/are outside of the established range for two consecutive days.

ii. [Reserved]

iii. Any three-hour average RTO bed temperature (measured in accordance with Condition 5.2.2 and calculated in accordance with Condition 5.2.5) below 1500 ^{o}F or the temperature established during the most recent performance test.

iv. Any three-hour average WESP total power (measured in accordance with Condition 5.2.2 and calculated in accordance with Conditions 5.2.3 and 5.2.4) below 80 percent of the value determined during the most recent performance test.

v. Any failure to perform the weekly dry hammermill bin vent (ID No. BV) or pellet cooler baghouse (ID No. BGH) inspections (monitored in accordance with Conditions 5.2.7 and 5.2.8).

vi. Any failure to perform the daily determinations of point source visible emissions from the WESP/RTO, dry hammermill bin vent (ID No. BV) filter exhaust, and/or pellet cooler baghouse (ID No. BGH) (monitored in accordance with Conditions 5.2.9).

vii. Any two consecutive daily determinations of point source visible emissions requiring action under Condition 5.2.9 from the same source.

viii. Any failure to perform the daily inspections of all sources of fugitive dust emissions (monitored in accordance with Condition 5.2.10).

ix. Any two consecutive daily determinations of fugitive source visible emissions requiring action under Condition 5.2.10 from the same source.

x. Specific identification of each period of excursion described in paragraphs i. through ix. of this condition. Include the magnitude, nature, and cause of any malfunction (if known), as well as the corrective action taken or preventive measures adopted (if any).

xi. Upon the initial startup of Pellet Coolers PC3 and PC4, any instance in which daily pressure drop readings of the dry hammermill bin vent (ID No. BV) and/or the pellet cooler cyclones (ID Nos. CYC3 and CYC4) (measured in accordance

with Condition 5.2.16) is/are outside of the established range for two consecutive days.

xii. Upon the initial startup of Pellet Coolers PC3 and PC4, any failure to perform the weekly dry hammermill bin vent (ID No. BV) inspections (monitored in accordance with Condition 5.2.8).

xiii. Upon the initial startup of Pellet Coolers PC3 and PC4, any failure to perform the daily determinations of point source visible emissions from the WESP/RTO, dry hammermill bin vent (ID No. BV) filter exhaust, and/or pellet cooler cyclones (ID Nos. CYC3 and CYC4) (monitored in accordance with Conditions 5.2.17).

xiv. Upon the initial startup of Pellet Coolers PC3 and PC4, any two consecutive daily determinations of point source visible emissions requiring action under Condition 5.2.17 from the same source.

xv. Upon the initial startup of Pellet Coolers PC3 and PC4, any specific identification of each period of excursion described in paragraphs iii., iv., xiii., ix., and xi. through xiv. of this condition. Include the magnitude, nature, and cause of any malfunction (if known), as well as the corrective action taken or preventive measures adopted (if any).

6.2 Specific Record Keeping and Reporting Requirements

New Conditions:

6.2.21 Upon the initial startup of Pellet Coolers PC3 and PC4, the Permittee shall keep operating records to determine the total amount of softwood and hardwood processed in the green hammermill (ID No. GHM), wood dryer (ID No. DRY), dry hammermills (ID Nos. DHM1 and DHM2), pellet mills (ID Nos. PM1-PM10), pellet coolers (ID Nos. PC3 and PC4) and pellet handling and storage (ID No. PHS) operations each month. The Permittee shall maintain a 12-month rolling average total of the total process rate for the above sources. These records shall be maintained in a form suitable for inspection and/or submittal to the Division, upon request.
[PSD Avoidance per 40 CFR 52.21]

6.2.22 Upon the initial startup of Pellet Coolers PC3 and PC4, the Permittee shall calculate the monthly PM/PM_{10}, emissions from the facility using the records from Condition 6.2.21 and the emission factors and equations below. All emission factors and calculations shall be kept as part of the monthly records, available for inspection or submittal, upon request. until the testing required in Section 4.2 is complete, the Permittee shall calculate PM emissions by using the emission factors and the equation provided in this condition. If the emissions testing required in Section 4.2 reveals emission factors higher than these listed below, the Permittee shall comply with Condition 4.2.8.

Additionally, the Permittee shall notify the Division in writing if any monthly total PM emissions exceed 20.8 tons. This notification shall be postmarked by the fifteenth day of the following month.
[391-3-1-.02(6)(b)1. and 40 CFR 70.6(a)(3)(i)]

$$TPM = [(BUR/DRY \times EF01) + (DHM1, 2 \times EF02) + (PC3, 4 \times EF03)] / 2000$$

Where:

TPM	=	Total PM emissions (tons/month)
BUR/DRY	=	Burner (BUR)/Dryer (DRY) production (ODT/month)
DHM1, 2	=	Dry Hammermills (DHM1, DHM2) production (TON/month)
PC3, 4	=	Pellet Coolers (PC3, PC4) production (TON/month)
EF01	=	Total PM emission factor (lb/TON) from WESP/RTO
EF02	=	Total PM emission factor (lb/TON) from BV
EF03	=	Total PM emission factor (lb/TON) from CYC3, CYC4

If the emissions testing required in Section 4.2.1 reveals emission factors higher than the factors listed below, the Permittee shall comply with Condition 4.2.5

Emission Unit	Exhaust Point	Pollutant	Factor[1][2]
Burner (BUR) + Dryer (DRY) + Pellet Mills (PM1-10)	WESP/RTO	Total PM	0.060 lb/ODT
Dry Hammermills (DHM1, DHM2)	BV		0.009 lb/TON
Pellet Coolers (PC3, PC4)	CYC3, CYC4		0.322 lb/TON

[1] ODT = weight of wood in short tons at 11% moisture (nominal)
[2] TON = weight of wood in short tons at 5% moisture (nominal)

6.2.23 Upon the initial startup of Pellet Coolers PC3 and PC4, the Permittee shall use the monthly total PM emissions (calculated per Condition 6.2.22) to calculate rolling 12-month total PM emissions for each calendar month in the reporting period. A twelve- month total shall be defined as the sum of the current month's total plus the totals for the previous eleven consecutive months. These records shall be kept available for inspection or submittal to the Division, upon request. The Permittee shall notify the Division in writing if any rolling 12-month total PM emissions exceeds 250 tons. This notification shall be postmarked by the fifteenth day of the following month.
[391-3-1-.03(2)(c)]

6.2.24 Upon the initial startup of Pellet Coolers PC3 and PC4, the Permittee shall calculate the monthly VOC emissions from the facility using the records from Condition 6.2.21 and the emission factors and equations below. All emission factors and calculations shall be kept as part of the monthly records, available for inspection by or submittal to the Division, upon request. Until the testing required in Section 4.2 is complete, the Permittee shall calculate VOC emissions by using the emission factors and the equation provided in this condition. If the emissions testing required in Section 4.2 reveals emission factors higher than these listed below, the Permittee shall comply with Condition 4.2.8.

Additionally, the Permittee shall notify the Division in writing if any monthly VOC emissions exceed 20.7 tons. This notification shall be postmarked by the fifteenth day of the following month.
[Title III Major Source Avoidance, PSD avoidance and 391-3-1-.02(6)(b)1.]

$$VOC = [(BUR/DRY \times EF_{01}) + (DHM1, 2 \times EF_{02}) + (PC3, 4 \times EF_{03}) + (PHS \times EF_{04})] / 2000$$

Where:

VOC	=	*VOC emissions (tons/month)*
BUR/DRY	=	*Burner (BUR)/Dryer (DRY) production (ODT/month)*
DHM1, 2	=	*Dry Hammermills (DHM1, DHM2) production (TON/month)*
PC3, 4	=	*Pellet Coolers (PC3, PC4) production (TON/month)*
PHS	=	*Pellet Handling & Storage (PHS) production (TON/month)*
EF_{01}	=	*VOC emission factor (lb/TON) from WESP/RTO*
EF_{02}	=	*VOC emission factor (lb/TON) from BV*
EF_{03}	=	*VOC emission factor (lb/TON) from CYC3/CYC4*
EF_{04}	=	*VOC emission factor (lb/TON) from PHS*

Emission Unit	Exhaust Point	Pollutant	Factor[1][2][3]
Burner (BUR) + Dryer (DRY) + Pellet Mills (PM1-10)	WESP/RTO	VOC	0.154 lb/ODT
Dry Hammermills (DHM1, DHM2)	BV		0.578 lb/TON
Pellet Coolers (PC3, PC4)	CYC3/CYC4		0.691 lb/TON
Pellet Handling & Storage (PHS)	SILO		0.006 lb/TON

[1] ODT = weight of wood in short tons at 11% moisture (nominal)
[2] TON = weight of wood in short tons at 5% moisture (nominal)
The Dryer (DRY) VOC emission factors (EF01) shall be multiplied by 50 any time the three (3) hour average RTO combustion temperature falls below 1500 F or the temperature from the most recent test, whichever is lower.

6.2.25 Upon the initial startup of Pellet Coolers PC3 and PC4, the Permittee shall calculate VOC emissions in accordance with EPA OTM-26 via the following equation: VOC = Method 25A VOC (as propane) + Methanol (as MeOH) + Formaldehyde (as HCHO) + Acetaldehyde (as ACET) – 0.65 x Methanol (as propane).
[391-3-1-.03(2)(c)]

6.2.26 Upon the initial startup of Pellet Coolers PC3 and PC4, the Permittee shall use the monthly VOC emissions (calculated per Condition 6.2.24) to calculate the rolling 12-month total VOC emissions for each calendar month in the reporting period and shall notify the Division in writing if any rolling 12-month VOC emissions exceeds 249 tons. This notification shall be postmarked by the fifteenth day of the following month. The Permittee shall detail the steps it will take to come into compliance with the VOC emission limit in Condition 2.1.1. These records shall be kept available for inspection or submittal, upon request.
[391-3-1-.03(2)(c)]

6.2.27 Upon the initial startup of Pellet Coolers PC3 and PC4, the Permittee shall calculate the monthly individual and total HAP emissions from the facility using the records from Conditions 6.2.21 and the and the emission factors and equations below. All emission factors and calculations shall be kept as part of the monthly records, available for inspection by or submittal to the Division, upon request. Until the testing required in Section 4.2 is complete, the permittee shall calculate HAP emissions by using the emission factors and the equation provided in this condition. If the emissions testing required in Section 4.2 reveals emission factors higher than these listed below, the Permittee shall comply with Condition 4.2.8.

Additionally, the Permittee shall notify the Division in writing if monthly individual MeOH, HCHO, or ACET emissions exceed 0.83 tons or if total HAP emissions exceed 2.08 tons during any calendar month. This notification shall be postmarked by the fifteenth day of the following month.
[Title III Major Source Avoidance and 391-3-1-.02(6)(b)1.]

$$HAP\_1 = [(BUR/DRY \times EF_{01}) + (DHM1,2 \times EF_{02}) + (PC3,4 \times EF_{03}) + (PHS \times EF_{04})] / 2000$$
$$HAP\_2 = [(BUR/DRY \times EF_{05}) + (DHM1,2 \times EF_{06}) + (PC3,4 \times EF_{07}) + (PHS \times EF_{08})] / 2000$$
$$HAP\_3 = [(BUR/DRY \times EF_{09}) + (DHM1,2 \times EF_{10}) + (PC3,4 \times EF_{11}) + (PHS \times EF_{12})] / 2000$$
$$HAP\_4 = [(BUR/DRY \times EF_{13})] / 2000$$

Where:

HAP_1 = *Methanol (MeOH) emissions (tons/month)*
HAP_2 = *Formaldehyde (HCHO) emissions (tons/month)*
HAP_3 = *Acetaldehyde (ACET) emissions (tons/month)*
HAP_4 = *Other HAP (OHAP) emissions (tons/month)*

BUR/DRY = *Burner (BUR) + Dryer (DRY) production (ODT/month)*
DHM1, 2 = *Dry Hammermills (DHM1, DHM2) production (TON/month)*
PC3, 4 = *Pellet Coolers (PC3, PC4) production (TON/month)*
PHS = *Pellet Handling & Storage (PHS) production (TON/month)*

EF_{01} = *Methanol (MeOH) emission factor (lb/TON) from WESP/RTO*
EF_{02} = *Methanol (MeOH) emission factor (lb/TON) from BV*
EF_{03} = *Methanol (MeOH) emission factor (lb/TON) from CYC3/CYC4*
EF_{04} = *Methanol (MeOH) emission factor (lb/TON) from PHS*
EF_{05} = *Formaldehyde (HCHO) emission factor (lb/TON) from WESP/RTO*
EF_{06} = *Formaldehyde (HCHO) emission factor (lb/TON) from BV*
EF_{07} = *Formaldehyde (HCHO) emission factor (lb/TON) from CYC3/CYC4*
EF_{08} = *Formaldehyde (HCHO) emission factor (lb/TON) from PHS*

EF_{09} = *Acetaldehyde (ACET) emission factor (lb/TON) from WESP/RTO*
EF_{10} = *Acetaldehyde (ACET) emission factor (lb/TON) from BV*
EF_{11} *Acetaldehyde (ACET) emission factor (lb/TON) from CYC3/CYC4*
EF_{12} *Acetaldehyde (ACET) emission factor (lb/TON) from PHS*

EF_{13} *Other HAP (OHAP) emission factor (lb/TON) from WESP/RTO*

EF	Emission Unit	Exhaust Point	Pollutant	Factor[1][2][3]
1	Burner (BUR) + Dryer (DRY) + Pellet Mills (PM1-PM10)	WESP/RTO	MeOH	0.008 lb/ODT
2	Dry Hammermills (DHM1, DHM2)	BV		0.002 lb/TON
3	Pellet Coolers (PC3, PC4)	CYC3/CYC4		0.008 lb/TON
4	Pellet Handling & Storage (PHS)	SILO		0.0005 lb/TON
5	Burner (BUR) + Dryer (DRY) + Pellet Mills (PM1-10)	WESP/RTO	HCHO	0.0075 lb/ODT
6	Dry Hammermills (DHM1, DHM2)	BV		0.0005 lb/TON
7	Pellet Coolers (PC3, PC4)	CYC3/CYC4		0.0025 lb/TON
8	Pellet Handling & Storage (PHS)	SILO		2.43E-04 lb/TON
9	Burner (BUR) + Dryer (DRY) + Pellet Mills (PM1-PM10)	WESP/RTO	ACET	0.003 lb/ODT
10	Dry Hammermills (DHM1, DHM2)	BV		0.0005 lb/TON
11	Pellet Coolers (PC3, PC4)	CYC3/CYC4		0.002 lb/TON
12	Pellet Handling & Storage (PHS)	SILO		0.0001 lb/TON

13	Burner (BUR) + Dryer (DRY)	WESP/RTO	OHAP	0.002 lb/ODT

[1] ODT = weight of wood in short tons at 11% moisture (nominal)
[2] TON = weight of wood in short tons at 5% moisture (nominal)
[3] OHAP = all other organic HAP
[4] The Dryer (DRY) HAP emission factors shall be multiplied by 50 any time the three (3) hour average RTOcombustion temperature falls below 1500F or the target set in the most recent performance test.

6.2.28 Upon the initial startup of Pellet Coolers PC3 and PC4, the Permittee shall use the monthly total HAP emissions (calculated per Condition 6.2.27) to calculate the 12-month rolling total individual and combined MeOH, HCHO, ACET, and OHAP emissions for each calendar month in the reporting period and shall notify the Division in writing if any 12-month individual HAP emissions exceeds 10 tons, or any 12-month combined rolling total HAP emissions exceed 25 tons. The Permittee shall detail the steps it will take to come into compliance with the HAP emission limits in Condition 2.1.2. This notification shall be postmarked by the fifteenth day of the following month. These records shall be kept available for inspection or submittal, upon request.
[391-3-1-.03(2)(c)]